



# Idaho Counties Ratio Study 2005

This ratio study was completed in March, 2006, and generally used sales which occurred between October 1, 2004 and September 30, 2005, to test 2005 assessments. Because of sample shortages in several counties and categories for which samples previously had been available, this time frame was expanded to include sales occurring several months on either side of the initial date parameters. This continues the practice of expanding samples to permit the most comprehensive ratio study to be conducted.

The 2005 study represents the sixth study completed using the procedures authorized under the revised provisions of property tax rule 131. Under this rule, the median is used to test compliance for samples of eleven or more. The mean is used for samples consisting of 5 - 10 observations. Although assessment level compliance is still tested with 90% confidence intervals, county reports contain a notation indicating any categories which would have failed to have been in compliance using an 80% confidence interval. Categories out of compliance based on 90% confidence intervals are subject to state equalization in 2006, unless 2006 values indicate compliance. If 90% confidence intervals are in compliance, categories out of compliance based only on 80% confidence intervals will not be subject to state equalization unless this test is failed in three ratio studies. Two categories currently are in this situation and an additional 19 categories in 16 counties failed 80% confidence based compliance for at least one year. More complete procedural information is found in the 2004 - 2005 Ratio Study Manual.

The 2005 ratio study shows 97 categories in 32 counties out of compliance with assessment level standards using 90% confidence intervals. These numbers indicate a significant increase in non-compliance situations in comparison to those noted in the 2004 ratio study and represent the greatest number of non-compliance situations ever observed. The 2005 results represent 25.4% non-compliance at the 90% level of confidence and an additional 5.5% non-compliance at the 80% level of confidence. This year's study includes analyses of 382 category combinations.

(Note that Charts I and II show 365 categories because of combinations of commercial, manufactured housing, and certain rural residential tract property categories in the statewide report that were not made in the county reports used to determine compliance.) Prior to state board of equalization recommendations, follow-up studies will be done to test 2006 assessments in the non-complying categories.

In 2005, 50.0% of all categories tested failed general uniformity standards, while 55.2% failed vertical equity (price-related differential) standards. These results indicate uniformity that has worsened since 2004.

The number of categories studied this year was greater than the number studied in 2004. The ratio studies continue to include many separate studies for various manufactured housing categories with sales including land.

### **Analysis:**

The statewide overall median level of assessment was similar to that noted in 2004. This is somewhat surprising given the large number of categories that failed to meet assessment level standards due to low level. However, the overall statistics are heavily influenced by relatively better assessment level found in Ada and Canyon counties, which account for more than one-half of all sales in residential categories. This year's report noted continuing and worsening over-assessment of manufactured homes without land.

The number of available sales continues to increase sharply, climbing 19.9% in 2005 after 14% and 23% increases during the previous two years. This remains as an important indicator of probable representativeness of samples. Although we cannot control underlying economic conditions which influence the potential volume of available sales, we often use expanded time frames to address diminished sample sizes and attempt to maintain as many analyses as possible. It is critical to continue to focus additional attention on the sample size issue to achieve the greatest possible representativeness.

Frequently, time adjustments were used in the 2005 ratio study to ensure that sales prices and assessed values both represented value as of January 1, 2005. Use of such adjustments expands in times of more rapid property value appreciation, as at present.

For compliance reports, categories or counties with fewer than five sales are not included. Detailed statistical reports, showing statistical information by county by category, include analyses of samples with as few as three sales and show submittals of one or two sales in any category, without accompanying statistics.

### **Changes for 2006 Ratio Study**

When the 2006 ratio study is completed in March, 2007, compliance with assessment level standards will be based on confidence intervals around the **median** for all useable sample sizes (no smaller than 5). In the 2005 ratio study just completed, these intervals were computed, but not used, for samples consisting of 5 – 10 observations. From reviewing these computations it appears that the use of median, rather than mean, confidence intervals for these small samples beginning with the 2006 ratio studies will nearly always grant more leeway rather than being more restrictive.

## **Attached documents**

The following documents are attached to this report to provide the user with both detailed statistical reports and a summary of the final 2005 Idaho ratio study:

1. Chart I summary of sales received;
2. Chart II summary of statistical results;
3. Chart comparing 2004 and 2005 level by category;
4. Chart comparing 2004 and 2005 uniformity by category;
5. Chart listing specific categories out of compliance with level standards and the number of categories out of compliance with uniformity and PRD standards.

Please feel free to contact me at (208) 334-7742 if you have any questions about this material. If you need additional copies, please check our website at [tax.idaho.gov](http://tax.idaho.gov).

**Chart I**  
**2005 Ratio Study Summary**  
**Sales Received**

Category	Counties Studied	Totals		Changes 2004/2005:	
		2005	2004	Number	Percent
<b>Urban Residential:</b>					
<b>Improved</b>	44	26,609	21,894	4,715	21.5%
<b>Unimproved</b>	36	2,661	2,254	407	18.1%
<b>Rural Residential:</b>					
<b>Subdivisions:</b>					
<b>Improved</b>	38	4,364	3,883	481	12.4%
<b>Unimproved</b>	38	2,377	2,284	93	4.1%
<b>Tracts:</b>					
<b>Improved</b>	41	2,075	1,651	424	25.7%
<b>Unimproved</b>	31	999	752	247	32.8%
<b>Condominiums:</b>					
<b>Condominiums: (Cat 26)</b>	7	381	507	(126)	-24.9%
<b>Condominiums: (Cat 27)</b>	3	32	33	(1)	-3.0%
<b>Commercial:</b>					
<b>Urban:</b>					
<b>Improved</b>	36	750	696	54	7.8%
<b>Unimproved</b>	14	315	187	128	68.4%
<b>Rural:</b>					
<b>Improved</b>	5	117	54	63	116.7%
<b>Unimproved</b>	3	42	20	22	110.0%
<b>Commercial Subtotal:</b>	NA	NA	NA	NA	NA
<b>Manufactured Homes:</b>					
<b>Manufactured Housing</b>	33	1,004	914	90	9.8%
<b>Manufactured Housing w/land</b>	36	1,160	644	516	80.1%
<b>Totals:</b>	<b>365</b>	<b>42,886</b>	<b>35,773</b>	<b>7,113</b>	<b>19.9%</b>

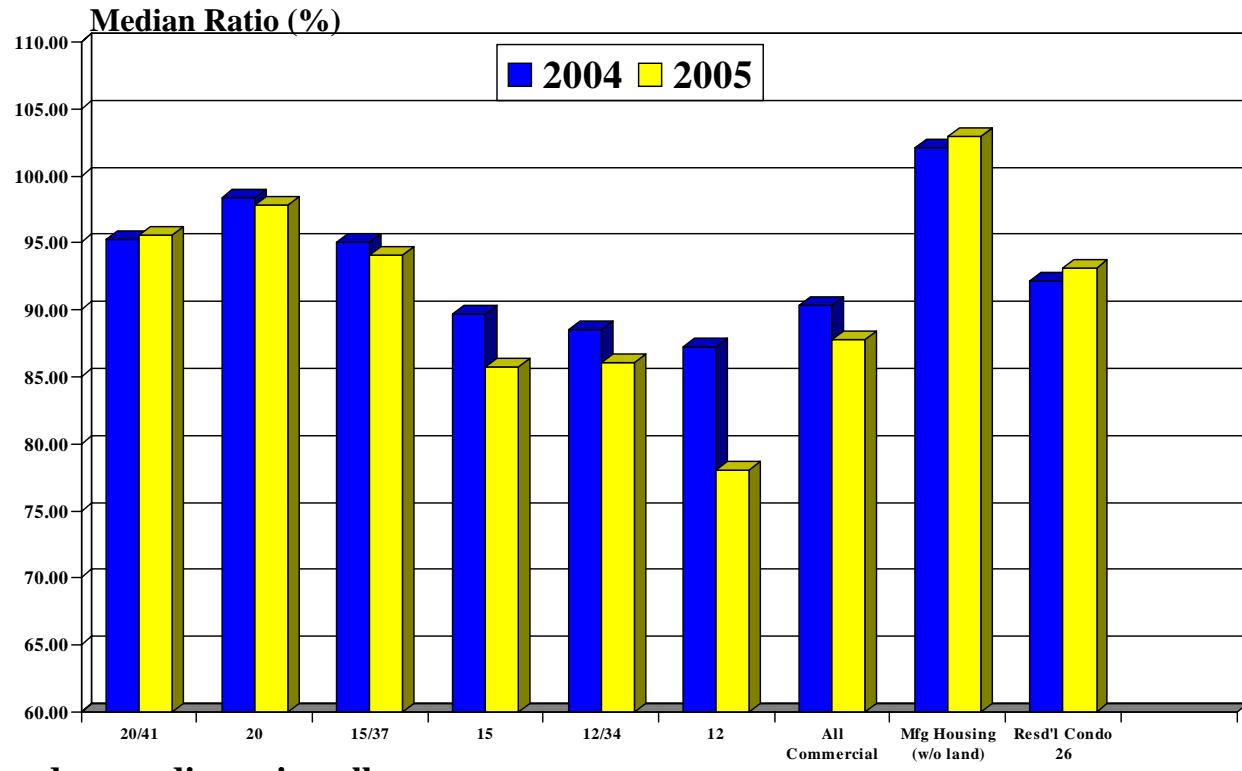
Note: Counties studied may not match individual county reports because of commercial, rural tract, and manufactured housing category combinations.

**Chart II**  
**2005 Final Ratio Study:**  
**Summary of Results**

Category	Number of Counties*	Number in Sample	Assessment Level:		Uniformity:	
			Median	Mean	COD	PRD
<b>Urban Residential:</b>						
<b>Improved</b>	44	26,609	95.61	95.04	10.73	1.00
<b>Unimproved</b>	36	2,661	97.85	92.34	16.21	1.04
<b>Rural Residential:</b>						
<b>Subdivisions:</b>						
<b>Improved</b>	38	4,364	94.13	91.88	11.96	1.03
<b>Unimproved</b>	38	2,377	85.72	85.24	26.90	1.04
<b>Tracts:</b>						
<b>Improved</b>	41	2,075	86.11	86.74	18.33	1.04
<b>Unimproved</b>	31	999	78.07	84.17	34.71	1.16
<b>Condominiums:</b>						
<b>Condominiums: (Cat 26)</b>	7	381	93.08	91.80	10.18	1.02
<b>Condominiums: (Cat 27)</b>	3	32	84.91	83.12	16.71	1.03
<b>Commercial:</b>						
<b>Urban:</b>						
<b>Improved</b>	36	750	86.62	86.46	20.70	1.01
<b>Unimproved</b>	14	315	91.56	86.40	20.10	0.96
<b>Rural:</b>						
<b>Improved</b>	5	117	93.47	89.75	18.33	1.06
<b>Unimproved</b>	3	42	89.68	88.05	18.38	1.07
<b>Commercial Subtotal:</b>	NA	NA	NA	NA	NA	NA
<b>Manufactured Housing:</b>						
<b>Manufactured Housing</b>	33	1,004	102.94	110.54	28.48	1.13
<b>Manufactured Housing w/land</b>	36	1,160	85.49	86.72	19.12	1.04
<b>Totals:</b>	<b>365</b>	<b>42,886</b>				

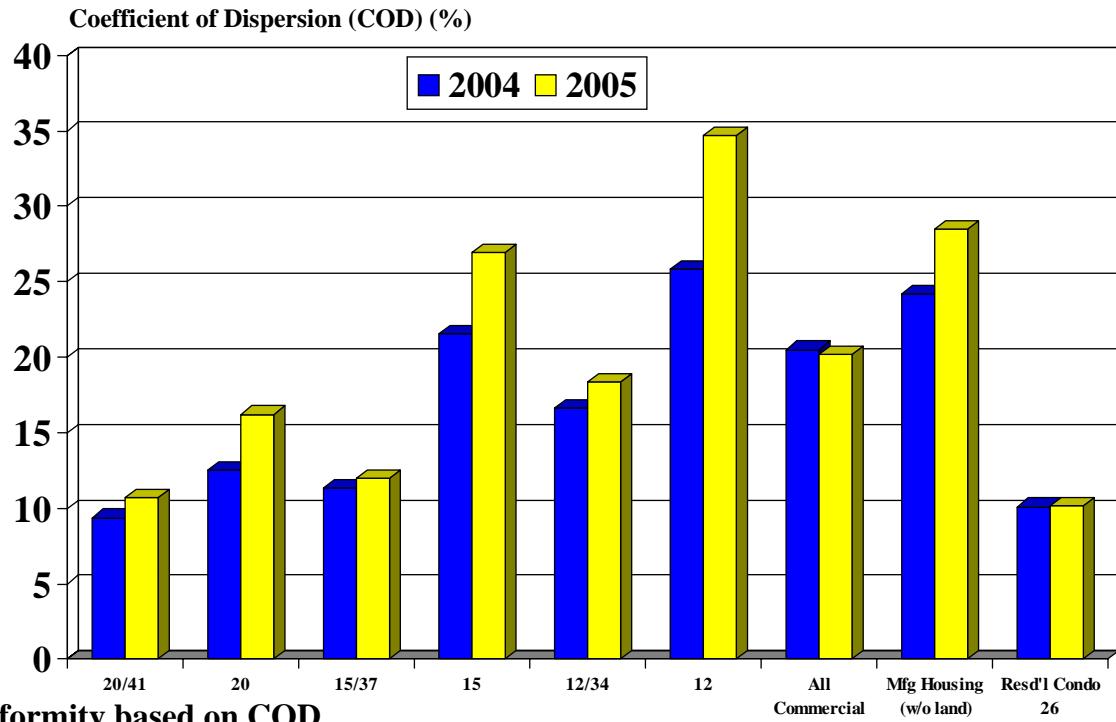
Note: Number of counties based on those with at least five (5) sales.

# Comparison of Ratio Study Level 2004 vs. 2005



Based on median using all sales in each category

# Comparison of Ratio Study Uniformity 2004 vs. 2005



**2005 Final Ratio Study  
Compliance with ratio study standards  
Final Report - revised March 21, 2006**

Chart indicates number of categories in or out of compliance with standards

April 17, 2006

County	Number of Categories	Level Standards		Categories out of compliance with level standards
		In	Out	
ADA	12	12	0	
ADAMS	8	2	6	c 20/41; 15/37; 15; 18; urban commercial; 12,15,20 with 46 or 48
BANNOCK	13	12	1	c 21
BEAR LAKE	6	6	0	
BENEWAH	11	9	2	c 15/37; 15
BINGHAM	7	6	1	c 20/41
BLAINE	10	8	2	c 12/34; 27
BOISE	9	8	1	c 15
				c 20/41; 20; 15/37; 15; 12/34 & 18/40; 12/18; 21/42 & 27; ru cm.;
BONNER	13	3	10	12,15,20, +46,47; 12,15,20 +48
BONNEVILLE	11	10	1	c 20
BOUNDARY	10	6	4	c 20/41; 15/37; 12/34; 12
BUTTE	2	2	0	
CAMAS	5	4	1	c 15
CANYON	9	9	0	
CARIBOU	3	3	0	
CASSIA	9	9	0	
CLARK	1	1	0	
CLEARWATER	10	5	5	c 20/41; 12/34; 12; 20/46; 12/48
CUSTER	10	8	2	c 15/37; 12,15,20, +46/47
ELMORE	9	5	4	c 20/41; 15/37; 15; mh w/ land
FRANKLIN	6	5	1	c 46/47
FREMONT	10	8	2	c 15/37; 15
GEM	10	8	2	c 12/34; 12
GOODING	8	8	0	
IDAHO	13	9	4	c 15/37, 15, 12/46; 12/48
JEFFERSON	7	7	0	
JEROME	8	4	4	c 20/41; 20; 15; 16/21
KOOTENAI	13	4	9	c20/41; 15; 12/34; 20; 15/37; 12; 21/42; 12/15/20+46; 12/15/20+48
LATAH	14	12	2	c 15; 15/48
LEMHI	9	7	2	c 15/37; 12/34
LEWIS	7	6	1	c 12/34
LINCOLN	5	4	1	c 15/48
MADISON	8	4	4	c 20/41; 20; 15/37; 12/34
MINIDOKA	8	8	0	
NEZ PERCE	15	14	1	c 20
ONEIDA	3	3	0	
OWYHEE	8	5	3	c 15; 12/34; 12
PAYETTE	10	7	3	c 15/37; improved commercial; 12, 15, 18, 20, +48
POWER	6	6	0	
SHOSHONE	11	4	7	c 20/41; 20; 15/37; 15; 12/34; 27+21/42; 13/35
TETON	5	3	2	c 20; 18
TWIN FALLS	10	8	2	c 20/41; 12
VALLEY	10	6	4	c 15/37; 15; 12/18; imp. comm.
WASHINGTON	10	7	3	c 12/34; 12; 12/46 & 12/48
<b>TOTALS</b>	<b>382</b>	<b>285</b>	<b>97</b>	

**Final Report - revised March 21, 2006**  
**Compliance with ratio study standards**  
**Final Report - revised March 21, 2006**

**Chart indicates number of categories in or out of compliance with standards**

**April 17, 2006**

County	80% CI out Compliance	Categories	Categories Out		Uniformity Standard		PRD Standards	
			80% 2 times	80% 3 times	In	Out	In	Out
ADA	1	C 12	1	0	9	3	7	5
ADAMS	0		0	0	0	8	2	6
BANNOCK	0		0	0	7	6	8	5
BEAR LAKE	0		0	0	2	4	1	5
BENEWAH	1	c 12/15/20 + 46	0	0	3	8	4	7
BINGHAM	3	c 15/37; 12/34; 21/42	0	0	6	1	6	1
BLAINE	1	c 15/37	0	0	8	2	4	6
BOISE	0		0	0	1	8	2	7
BONNER	0		0	0	2	11	1	12
BONNEVILLE	0		0	0	7	4	8	3
BOUNDARY	0		0	0	3	7	2	8
BUTTE	0		0	0	1	1	0	2
CAMAS	2	c 20/41; 15/37	0	0	1	4	3	2
CANYON	0		0	0	8	1	7	2
CARIBOU	0		0	0	3	0	3	0
CASSIA	0		0	0	6	3	2	7
CLARK	0		0	0	0	1	0	1
CLEARWATER	1	c 15	0	0	5	5	6	4
CUSTER	0		0	0	2	8	1	9
ELMORE	2	c 12; 65/49	0	0	3	6	5	4
FRANKLIN	0		0	0	6	0	2	4
FREMONT	1	c 20	0	0	1	9	3	7
GEM	0		0	0	8	2	6	4
GOODING	0		0	0	7	1	5	3
IDAHO	1	12/34	0	0	5	8	4	9
JEFFERSON	0		0	0	6	1	6	1
JEROME	0		0	0	6	2	3	5
KOOTENAI	0		0	0	2	11	4	9
LATAH	0		0	0	10	4	11	3
LEMHI	1	c 20	0	0	0	9	3	6
LEWIS	0		0	0	1	6	1	6
LINCOLN	2	c 20; 12 & 20 + 46&48	0	0	3	2	3	2
MADISON	1	c 21/42	0	0	5	3	2	6
MINIDOKA	0		0	0	6	2	3	5
NEZ PERCE	0		0	0	12	3	12	3
ONEIDA	1	c 20/41	0	0	1	2	2	1
OWYHEE	0		0	0	6	2	5	3
PAYETTE	0		0	0	8	2	5	5
POWER	1	commercial	0	0	3	3	1	5
SHOSHONE	1	c 12/18	1	0	1	10	0	11
TETON	0		0	0	2	3	3	2
TWIN FALLS	0		0	0	5	5	5	5
VALLEY	1	c 20/41	0	0	4	6	5	5
WASHINGTON	0		0	0	6	4	5	5
<b>TOTALS</b>	<b>21</b>		<b>2</b>	<b>0</b>	<b>191</b>	<b>191</b>	<b>171</b>	<b>211</b>